

- (a) Statistical data for foreign stations.
 - (b) Weather maps on the scale 1:20,000,000 for 1h., 7h., 13h., and 18h., the maps for 7h. and 18h. covering a wide area.
 - (c) Particulars of observations from ships received by wireless telegraphy.
 - (d) Notes on the weather.
- III. The Upper Air Supplement is issued daily at noon. It contains:
- (a) Maps showing the direction and velocity of the wind at different levels for 13h. and 18h. of the day preceding that of issue, and for 7h. of the day of issue as deduced by observations of pilot balloons and other methods at the office observatories and the meteorological stations of the Air Ministry.
 - (b) Particulars of upper air temperatures that may have been reported to the office.
 - (c) Notes on the upper air.

INTERNATIONAL METEOROLOGICAL COMMITTEE MEETING IN LONDON, JULY, 1919.

The British Meteorological Office has published the minutes of the meeting of the International Meteorological Committee which was held in London, July 3 to 9, 1919 (M. O. 237). The American representative at this meeting was Dr. L. A. Bauer, department of terrestrial magnetism, Carnegie Institution, in place of Prof. C. F. Marvin, Chief of the Weather Bureau, who found it impracticable to attend.¹

The minutes consist not only of the discussions at each meeting and the resolutions adopted to be presented at the conference of meteorologists in Paris early in October, 1919, but also the letter of Sir Napier Shaw calling the meeting, and the appendices containing the reports of subcommittees. Sir Napier, in his opening remarks, stated the purpose of the meeting as follows:

"The business of this meeting will be, therefore, mainly the information of the representatives of the several countries upon the points to which the attention of the cooperating services must be directed." A fair idea of the scope of the discussion may be gathered from the following: Codes for upper air observations, and for barometric tendency, daily synoptic charts of the Atlantic, polar research, cloud observations, sea disturbance, visibility, transmission of observations by radio, instruction in meteorology for wireless operators. It is impossible to give a detailed account of these discussions, which were informal; but there is no doubt that the meeting was highly successful and amply fulfilled its purpose.—C. L. M.

INTERNATIONAL METEOROLOGICAL CONFERENCE.

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An International Conference of Directors of Meteorological Institutions was held in Paris at the invitation of the French Government from September 30 to October 6. The British Empire was represented by the following: Sir Napier Shaw, Director of the Meteorological Office, Capt. A. J. Bamford (Ceylon), Lieut. Col. Bates (New Zealand), Mr. H. A. Hunt (Commonwealth of Australia), Mr. H. Knox Shaw (Egypt), Mr. C. Stewart (Union of South Africa), Sir Frederick Stupart (Canada), Dr. G. T. Walker (India), Lieut. Grant (Admiralty Meteorological Service). The majority of the allied and neutral countries were represented at the conference, but unfortunately Prof. Marvin, Chief of the Weather Bureau of

the United States, and Prof. Nakamura, Director of the Meteorological Service of Japan, were unable to attend and represent their respective countries.

Sir Napier Shaw was elected president of the conference, M. Angot (France), secretary, and M. Palazzo (Italy), Capt. Ryder (Denmark), Prof. Van Everdingen (Holland) and Sir Frederick Stupart (Canada), vice-presidents.

The first task which the conference set itself was the reestablishment of an international organization for securing cooperation on international lines without which much valuable meteorological effort must inevitably run to waste.

The new organization agreed upon is much on the lines of that which existed before the war. It comprises three bodies (1) Conferences of Directors, (2) the International Meteorological Committee, (3) Commissions. The Conferences, to which the director of any independent observatory or service may be invited, are to be convened every 6 years, not 10 years as heretofore. The Conferences nominate an International Meteorological Committee for the purpose of supervising the carrying out of the decisions of the Conference and generally maintaining international intercourse on meteorological matters during the intervals between the conferences. Membership of this Committee is limited to the directors of independent meteorological services.

The number of members, hitherto restricted to a maximum of 17, has been increased to a maximum of 20. The following were elected members of the present Committee: Sir Napier Shaw (Great Britain), Messieurs Palazzo (Italy), Chaves (Portugal), Nakamura (Japan), Angot (France), Maurer (Switzerland), Sir Frederick Stupart (Canada), van Everdingen (Holland), Ryder (Denmark), Walker (India), Marvin (United States), Jaumotte (Belgium), Hesselberg (Norway), Hunt (Australia), Eginitis (Greece). The remaining five places are left to be filled, as the Committee thinks fit, by cooptation.

Commissions are appointed to discuss and report on special subjects. Commissions on the following subjects were called into being by the Conference:

- Agricultural meteorology—President, M. Angot.
- Weather telegraphy—President, Lieut. Col. Gold.
- Marine meteorology—President, M. van Everdingen.
- Solar radiation—President, M. Maurer.
- Application of meteorology to aerial navigation—M. Sacconey.
- Réseau mondial—President, Sir Napier Shaw.
- Exploration of the upper atmosphere—M. Bjerknes.
- Terrestrial magnetism and atmospheric electricity—M. Angot.

Polar investigation—President, Sir Napier Shaw.

Having settled the general question of procedure, the Conference passed on to the consideration of practical questions. These discussions ranged over a wide field. Among subjects discussed were meteorological units, the hours of observations for telegraphic reports, the codes to be used the arrangements for securing the transmission of the information by wireless, and the extension of the reports to include more detailed information about clouds and visibility.

Upon the opinion of the Conference being desired as to the unit of pressure which should be adopted for the purposes of international stations, the majority gave a vote in favor of the millibar.

¹ A preliminary report on this meeting by Dr. Bauer was published in the MONTHLY WEATHER REVIEW for July, 1919, p. 449.